IN THE CLAIMS:

Claims 1-7 (Canceled)

8. (Currently Amended) A method of determining a polishing endpoint of a surface located on a semiconductor wafer, comprising:

emitting a first signal from an emitter located adjacent one of a carrier head or a polishing platen and causing said first signal to pass through a polished film located on a semiconductor wafer, and thereby provide a second signal having a signal intensity less than a signal intensity of said first signal;

receiving said second signal emanating from said film with a receiver located on the side of said semiconductor wafer in opposition to said emitter, said receiver adjacent another of said carrier head or said polishing platen; and

determining a polishing endpoint for said film as a function of a change of intensity between said first and second signals.

9. (Currently Amended) ~~The method as recited in Claim 8~~ A method of determining a polishing endpoint of a surface located on a semiconductor wafer, comprising:

~~wherein said emitting a first signal includes~~ emitting a first signal from a signal emitter located adjacent ~~said~~ a carrier head and causing said first signal to pass through a polished film located on a semiconductor wafer, and thereby provide a second signal having a signal intensity less than a signal intensity of said first signal;

~~and said~~ receiving said second signal ~~includes receiving said second signal~~ emanating from said film with a signal receiver located adjacent ~~said~~ a polishing platen; and

determining a polishing endpoint for said film as a function of a change of intensity between said first and second signals.

10. (Withdrawn) The method as recited in Claim 8 wherein said emitting a first signal includes emitting a first signal from a signal emitter located adjacent said polishing platen and said receiving said second signal includes receiving said second signal with a signal receiver located adjacent said carrier head.

11. (Original) The method as recited in Claim 8 wherein said emitting a first signal includes emitting a first signal comprised of acoustic waves.

12. (Original) The method as recited in Claim 11 wherein said emitting a first signal comprised of acoustic wavers includes emitting a first signal comprised of ultrasonic acoustic waves.

13. (Original) The method as recited in Claim 8 wherein said emitting a first signal includes emitting a first signal comprised of acoustic waves having a plurality of frequencies and wherein said determining includes determining a polishing endpoint for said film as a function of a change of intensity of each of said plurality of acoustic waves between said first and second signals.

14. (Original) The method as recited in Claim 8 wherein said determining includes determining a polishing endpoint for said film as a function of a change of a signal wavelength or a signal amplitude between said first and second signals.

15. (Currently Amended) A method of manufacturing an integrated circuit, comprising:

forming an integrated circuit layer on a semiconductor wafer;

polishing said integrated circuit layer with a polishing apparatus having a carrier head and a polishing platen associated therewith;

determining a polishing endpoint of said integrated circuit layer, including:

emitting a first signal from an emitter located adjacent one of said carrier head or said polishing platen and causing said first signal to strike said integrated circuit layer, and thereby provide a second signal having a signal intensity less than a signal intensity of said first signal;

receiving said second signal emanating from said integrated circuit layer with a receiver located on the side of said semiconductor wafer in opposition to said emitter, said receiver adjacent another of said carrier head or said polishing platen; and

determining said polishing endpoint as a function of a difference of intensity between said first and second signals.

16. (Original) The method as recited in Claim 15 wherein said second signal is a resulting signal that results from said first signal striking said integrated circuit layer.

17. (Currently Amended) ~~The~~ A method ~~as recited in Claim 15 wherein~~ of manufacturing an integrated circuit, comprising:

forming an integrated circuit layer on a semiconductor wafer;

polishing said integrated circuit layer with a polishing apparatus having a carrier head and a polishing platen associated therewith;

determining a polishing endpoint of said integrated circuit layer, including:

~~said emitting a first signal includes~~ emitting a first signal from a signal emitter located adjacent ~~said~~ a carrier head and causing said first signal to strike said integrated circuit layer, and thereby provide a second signal having a signal intensity less than a signal intensity of said first signal;

~~and said receiving said second signal includes~~ receiving said second signal emanating from said integrated circuit layer with a signal receiver located adjacent ~~said~~ a polishing platen; and

determining said polishing endpoint as a function of a difference of intensity between said first and second signals.

18. (Withdrawn) The method as recited in Claim 15 wherein said emitting a first signal includes emitting a first signal from a signal emitter located adjacent said polishing platen and said receiving said second signal includes receiving said second signal with a signal receiver located adjacent said carrier head.

19. (Original) The method as recited in Claim 15 wherein said emitting a first signal comprised of acoustic wavers includes emitting a first signal comprised of ultrasonic acoustic waves.

20. (Original) The method as recited in Claim 15 wherein said emitting a first signal includes emitting a first signal comprised of acoustic waves having a plurality of frequencies and wherein said determining includes determining a polishing endpoint for said integrated circuit layer as a function of a change of intensity of each of said plurality of acoustic waves between said first and second signals.

21. (Original) The method as recited in Claim 15 wherein said determining includes determining a polishing endpoint for said integrated circuit layer as a function of a change of a signal wavelength or a signal amplitude between said first and second signals.